OPETIOPALPUS SCUTELLARIS PANZER (COLEOPTERA: CLERIDAE: KORYNETINAE) ESTABLISHED IN THE WESTERN AUSTRALIAN WHEATBELT

JUSTIN S. BARTLETT1 and ANDRAS SZITO2

¹Biosecurity Queensland, Department of Agriculture, Fisheries and Forestry (Qld), Ecosciences Precinct, GPO Box 267, Brisbane, Qld 4001 (Email: justin.bartlett@daff.qld.gov.au)

²Plant Biosecurity Entomology, Department of Agriculture and Food Western Australia, 3 Baron-Hay Court, South Perth, WA 6151 (Email: andras.szito@agric.wa.gov.au)

Abstract

The status of the exotic clerid beetle *Opetiopalpus scutellaris* Panzer has been unclear due to the ambiguous nature of the single previous Australian record. Recent pheromone trapping at grain stores in Western Australia indicate that *O. scutellaris* is locally naturalised within the Western Australian wheatbelt. It is considered likely that the trapped *O. scutellaris* specimens originated from surrounding areas rather than being directly associated with grain.

Introduction

Corporaal (1950) listed 28 species of *Opetiopalpus* Spinola, distributed widely throughout Africa and the Palaearctic. References to the biology of this genus indicate associations with bovid manure, fungi and various plants, especially legumes, in meadows and grasslands (Bahillo de la Puebla and López-Colón 2006, Valcárcel *et al.* 2009). *Opetiopalpus scutellaris* Panzer (Fig. 1), from Africa, central and southern Europe and western Asia, has been associated with old timber (Gerstmeier 1998) and bird nests (Hicks 1959). This species was first reported in Australia from a single specimen (in Australian National Insect Collection, Canberra, ACT) from Western Australia, labelled 'Acropolis, Geraldton, G22. 22/9/76' (Kolibáč 2003).



Fig. 1. Opetiopalpus scutellaris, specimen from Wagin, WA (in JSBC).

Discussion

The collection data of the Geraldton specimen give no clues as to the nature of its capture or whether Acropolis is a place or a freight vessel; however, as

no location 'Acropolis' has been gazetted (Geoscience Australia 2012), as a general cargo ship of that name was found to have been in service in 1976 (Cameron 2005) and as Geraldton is a port city, the latter seems most likely. In isolation, this record suggests an interception event and implies adventive status for *O. scutellaris* in Australia.

Since January 2011, numerous *O. scutellaris* specimens have been collected in traps using aggregation pheromone lures to monitor the stored product pests *Tribolium castaneum* (Herbst) (Tenebrionidae) and *Rhyzopertha dominica* (Fabricius) (Bostrichidae) near grain stores at Mingenew, Three Springs, Coorow, Koorda and Wagin in Western Australia. These recent collections provide evidence that *O. scutellaris* is locally naturalised within, and just north of, the wheatbelt region of Western Australia. It is not known whether the trapped specimens were directly associated with the grain stores, or were inhabiting surrounding areas in association with dung, timber or bird nests. Since various non grain-associated insect species were collected in the same traps and as *O. scutellaris* has not previously been reported in association with grain, the latter seems more likely. Specimens are lodged in the Dept of Agriculture & Food Collection, South Perth, WA (DAFWA), the Queensland Primary Industries Insect Collection, Dutton Park, Qld (QDPC), and in the collection of the first author (JSBC).

Acknowledgements

We thank Dave Cousins and Michelle Chami (Dept of Agriculture & Food, Western Australia) for making recently collected *Opetiopalpus scutellaris* material available and Greg Daglish (Agri-Science Queensland, Dept of Agriculture, Fisheries & Forestry) for reviewing the manuscript.

References

BAHILLO de la PUEBLA, P. and LÓPEZ-COLÓN, J.I. 2006. Los cléridos de la comunidad de Madrid (Coleoptera, Cleridae). *Graellsia* 62(número extraordinario): 403-418.

CAMERON, J. 2005. Acropolis - Piraeus, Greece. Great Lakes and International Ship Photograph Archives [website]. [Accessed 9 October 2012.] Available: http://www.wellandcanal.ca/salties/a/acropolis/acropolis.htm

CORPORAAL, J.B. 1950. Pars 23 (Editio secunda), Cleridae. In: Hinks, W.D. (ed.), Coleopterorum Catalogus Supplimenta. W. Junk, The Hague.

GEOSCIENCE AUSTRALIA. 2012. Gazetteer of Australia Place Name Search [website]. [Accessed 9 October 2012.] Available: http://www.ga.gov.au/place-names/

GERSTMEIER, R. 1998. Checkered beetles. Illustrated key to the Cleridae of the Western Palaearctic. Margraf Verlag, Weikersheim.

HICKS, E. A. 1959. Check-list and bibliography on the occurrence of insects in birds' nests. Iowa State College Press, Ames.

KOLIBÁČ, J. 2003. A review of Australian genera of Korynetinae (Coleoptera, Cleridae). Entomologica Basiliensia 25: 41-97.

VALCÁRCEL, J.P., PILOÑA, F.P. and RUIZ-TAPIADOR, I. 2009. Sobre la presencia de *Opetiopalpus bicolor* (Laporte de Castelnau, 1836) (Coleoptera, Cleridae) en lahunas de Espana Central. *Arquivos Entomolóxicos* 1: 17-21.